

2<sup>nd</sup> IEEE INTERNATIONAL CONFERENCE  
ON  
ELECTRICAL POWER AND ENERGY SYSTEMS  
**ICEPES-2021**

*IEEE Conference Record: 52894*



December 10-11, 2021

For more information about the conference, keep visiting [www.icepes2021-manit.in/](http://www.icepes2021-manit.in/)



## Integrated Program

10/12/2021 (Friday)										
10:00-11:00	11:00-12:00	12:00-12:30	12:30-2:00		2:15-3:00	3:15-4:45	5:00-6.30			
Inauguration	Keynote-1	<b>LUNCH</b>	TS1	T1a T1b	Keynote-2	TS2	T2+T3 T4	TS3	T5 T6+ T7+T8+T9	
11/12/2021 (Saturday)										
9:15-10:45	11:00-12:00	12:15-1:45	1:45-2:15	2:15-3:00	3:15-4:45	5:00-6:30				
TS4	T10a T10b	Keynote-3	TS5	T12 T10c+T11	<b>LUNCH</b>	Keynote-4	TS6	T13a T13b	TS7	T13c T14+T15+T16

\*TS : TECHNICAL SESSION, T: TRACK NUMBER

## Session wise Program with Paper ID

Tech. Session No.	TS1		TS2		TS3		TS4		TS5		TS6		TS7	
	T1a	T1b	T2+T3	T4	T5	T6+T7+T8+T9	T10a	T10b	T12	T10c+T11	T13a	T13b	T13c	T14+T15+T16
Paper ID	29	140	64	65	30	41	11	51	67	141	45	133	167	20
	34	154	90	68	38	49	19	61	103	158	52	135	171	56
	35	156	122	69	43	96	24	82	124	177	63	139	182	86
	50	188	136	128	55	97	25	84	173	197	77	146	186	93
	60	198	164	144	94	115	27	87	180	200	80	147	193	95
	113	212	183	176	142	213	39	105	184	217	102	150	194	106
			203		143	215	191	107		48	120	151	214	134
			210		157						125	160	216	174
											132	166		175

\*TS : TECHNICAL SESSION, T: TRACK NUMBER

## DETAILED PROGRAM: DAY-I

**Date:** 10/12/2021 (Friday)

Time	Event		Mode
10:00-11:00AM	<p style="text-align: center;"><b>Inauguration</b> <b>Chief Guest:</b> <b>Shri S.S. Barpanda</b> Director (Market Operations) Power System Operation Corporation Limited (POSOCO) New Delhi</p>		<a href="#">Click here to join the meeting</a>
11:00-12:00PM	<p style="text-align: center;"><b>Keynote - I</b> <b>Shri Abhishek Ranjan</b> Additional Vice-President, BSES Rajdhani Power Limited New Delhi</p>		<a href="#">Click here to join the meeting</a>
12:00-12:30	<b>LUNCH</b>		
12:30-2:00 PM	TS1	<b>T1b: Power System Stability, Dynamics &amp; Control</b>	<a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>
2.15-3.00 PM	<p style="text-align: center;"><b>Keynote - II</b> <b>Dr. Jiwan Kumar Pandit</b> Associate Director, Office of Media &amp; Public Relations ISRO Bengaluru</p>		<a href="#">Click here to join the meeting</a>
3:15-4:45 PM	TS2	<b>T4: Smart Grid and Smart Technologies</b>	<a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>
5:00-6:30 PM	TS3	<b>T6: High Voltage and Insulation Engineering</b> <b>T7: Robotics and Control Systems</b> <b>T8: Sensors and Signal Conditioning</b> <b>T9: Signals and Systems</b>	<a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>

## DETAILED PROGRAM: DAY-2

**Date:** 11/12/2021 (Saturday)

Time	Event		Mode
9:15-10:45 AM	TS4	<b>T10b: Power Electronics, Instrumentation and control in Electrical drives</b>	<a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>
11:00-12:00 PM	<p style="text-align: center;"><b><u>Keynote – III</u></b> <b>Prof. M. F. Rahman</b> University of New South Wales, Sydney Australia</p>		<a href="#">Click here to join the meeting</a>
12:15-1:45 PM	TS5	<p><b>T10c: Power Electronics, Instrumentation and control in Electrical drives</b> <b>T11: Applications of Power Electronics in Power System</b></p>	<a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>
1:45-2.15 PM	<b>LUNCH</b>		
2:15-3:00 PM	<p style="text-align: center;"><b><u>Keynote – IV</u></b> <b>Dr. Katsushi Ikeuchi,</b> Sr. Principal Research Manager Microsoft Corporation Headquarters, Redmond, Washington, USA</p>		<a href="#">Click here to join the meeting</a>
3:15-4:45 PM	TS6	<b>T13b: Applications of Soft Computing Techniques in Electrical Power and Energy Systems</b>	<a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>
5:00-6:30 PM	TS7	<p><b>T14: Instrumentation &amp; Biomedical Engineering</b> <b>T15: Technology relevant to Covid-19 Pandemic</b> <b>T16: Any other relevant topic</b></p>	<a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>

<b>Technical Session: TS1-B</b>			<b>12.30-2.00 pm</b>
Venue: SLIET Longowal 10 <sup>th</sup> Dec 2021			
<b>Track 1(T1b):</b> Power System Stability, Dynamics & Control <a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>			<b>Chair:</b> Dr. Manpreet Kaur <b>Co-chair:</b> Dr. Diljinder Singh <b>Rapporteur:</b> Dr. Jaspreet Singh
S.N.	Paper ID	Paper Title	Primary/Registered Author
1	140	SYSTEM FREQUENCY RESPONSE BASED OPTIMUM LOAD SHEDDING FOR INDUSTRIAL POWER SYSTEM	MUKESH KUMAR KIRAR
2	154	COMPARATIVE PERFORMANCE ANALYSIS OF CONVENTIONAL TECHNOLOGIES AND EMERGING TRENDS IN WIND TURBINE GENERATOR	SHWETA MEHROLIYA
3	156	OPTIMAL PMU POSITIONING CONSIDERING THE EFFECT OF ZERO INJECTION BUSES IN ADVANCED GRID MONITORING	MOHD. NAVAID ANSARI
4	188	EFFECT OF REHEAT TURBINE ON PERFORMANCE OF AGC OF TWO-AREA THERMAL-THERMAL POWER SYSTEM IN DEREGULATED ENVIRONMENT USING PSO OPTIMIZED PID-N CONTROLLER	PRASHANT KHARE, M. RAJU
5	198	VOLTAGE STABILITY ASSESSMENT AND IMPROVEMENT IN POWER SYSTEMS WITH SOLAR PHOTOVOLTAIC PENETRATION	CHANDRAKANT DONDARIYA
6	212	LOAD FREQUENCY CONTROL OF MICROGRID INCLUDING SMALL HYDRO POWER PLANT AND DISTRIBUTED GENERATION WITH EV PENETRATION	M. RAJU



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**December 10-11, 2021**

<b>Technical Session: TS2-B</b> Venue: SLIET Longowal 10 <sup>th</sup> Dec 2021			<b>3.15-4.45 pm</b>
<b>Track 4(T4):</b> Smart Grid and Smart Technologies <a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>			<b>Chair:</b> Dr. A.S. Arora <b>Co-Chair:</b> Dr. Charanjiv Gupta <b>Rapporteur:</b> Dr. Asim Ali Khan
<b>S.N.</b>	<b>Paper ID</b>	<b>Paper Title</b>	<b>Primary/Registered Author</b>
1	65	RENEWABLE MICROGRIDS WITH ECONOMIC AND ENVIRONMENTAL BENEFITS: A REVIEW	SUNITA SHUKLA
2	68	A REVIEW OF MODERN VIRTUAL INERTIA CONTROL STRATEGIES FOR MICROGRID IMPLEMENTATION	ANIRUDH PRATAP
3	69	TRANSACTIVE ENERGY MANAGEMENT OF SOLAR INTEGRATED VILLAGES IN INDIA	PRERNA JAIN, TEJASWINI YERUSU
4	128	PLANNING AND CONTROL TECHNIQUES OF SMART GRIDS	SHUBHAJYOTI MONDAL, AASHISH KUMAR BOHRE
5	144	AN OVERVIEW OF CESC'S 315 KWH GRID CONNECTED BATTERY ENERGY STORAGE SYSTEM	RAJIB KUMAR DAS
6	176	EMPLOYING DEMAND RESPONSE IN ENERGY MANAGEMENT OF MICROGRID USING Q LEARNING	AKHILESH CHANDRAKAR



<b>Technical Session: TS3-B</b> Venue: SLIET Longowal 10 <sup>th</sup> Dec 2021			<b>5.00-6.30 pm</b>
<b>Track 6(T6):</b> High Voltage and Insulation Engineering <b>Track 7(T7):</b> Robotics and Control Systems <b>Track 8(T8):</b> Sensors and Signal Conditioning <b>Track 9(T9):</b> Signals and Systems <a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>			Chair: Dr. J.S. Dhillon Co-Chair: Dr. Pratibha Tyagi Rapporteur: Dr. Barasha Mali
S.N.	Paper ID	Paper Title	Primary/Registered Author
1	41	A REVIEW AND ANALYSIS OF TOPOLOGIES OF LIGHT EMITTING DIODE (LED) DRIVERS	NEHA GUPTA
2	49	3-D PARTICLE TRAJECTORY TRACKING AND CHARACTERIZATION OF ELECTRON BEAM PARAMETERS OF HIGH POWER ELECTRON GUN	VANYA GOEL
3	96	SMARTPHONE BASED CNN-GRU FRAMEWORK FOR HUMAN ACTIVITY RECOGNITION	UPDESH VERMA
4	97	OPTIMIZING THE POSITION OF GRAPHENE OXIDE ABSORBER TO ENHANCE THE RADIATION PATTERN OF ANTENNA ARRAY	SUREKHA RANI
5	115	ASSESSING THE RISK OF RELIABILITY OF THREE PHASE GIS UNDER VARIOUS MULTIPLE ABNORMALITIES	K. NAGA DIVYA, RAFI VEMPALLE
6	213	ON-SITE HEALTH ASSESSMENT OF 765KV BUSHING INSULATION USING VFTD	HARISH KUMAR SHARMA
7	215	MODEL ORDER REDUCTION OF INTERVAL SYSTEMS USING ROUGH APPROXIMATION WITH MID-POINT CONCEPT AND STABILITY EQUATION METHOD	SUNIL KUMAR GAUTAM





<b>Technical Session: TS4-B</b> Venue: SLIET Longowal 11 <sup>th</sup> Dec 2021			<b>9.15-10.45 am</b>
<b>Track 10b(T10b):</b> Power Electronics, Instrumentation and control in Electrical drives <a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>			Chair: Dr. Sanjay Marwaha Co-Chair: Dr. M.S. Manna Rapporteur: Dr. Gurmeet Singh Grewal
S.N.	Paper ID	Paper Title	Primary/Registered Author
1	51	DESIGN AND FINITE ELEMENT ANALYSIS OF BRUSHLESS DOUBLY FED RELUCTANCE MACHINE FOR VARIABLE SPEED APPLICATIONS	MUKESH KUMAR
2	61	MITIGATION OF COGGING TORQUE FOR THE OPTIMAL DESIGN OF BLDC MOTOR	RUPAM BANSAL
3	82	A NOVEL 3-PHASE SYMMETRIC/ASYMMETRIC REDUCED DEVICE COUNT MULTILEVEL INVERTER FOR ELECTRIC DRIVE APPLICATIONS	DILIP KUMAR PATEL
4	84	A BIPOLAR MULTILEVEL STRUCTURE FOR DC/AC CONVERSION WITH REDUCED DEVICE COUNT	NIRAJ KUMAR DEWANGAN
5	87	ANALYSIS OF AIR GAP INDUCTANCE AND ITS EFFECTS ON TORQUE PROFILE OF SWITCHED RELUCTANCE MOTOR	AVINASH KUMAR
6	105	AERODYNAMIC DESIGN OF ROTOR OF 1 KW HORIZONTAL AXIS WIND TURBINE	SONALI SHRIVASTAVA
7	107	DSP-BASED PWM AC-DC CONVERTER FOR DC VOLTAGE REGULATION WITH LINEAR CONTROL CHARACTERISTICS	VIKASH KUMAR, DHANANJAY KUMAR





<b>Technical Session: TS5-B</b> Venue: SLIET Longowal 11 <sup>th</sup> Dec 2021			<b>12.15-1.45 pm</b>
<b>Track 10c(T10c):</b> Power Electronics, Instrumentation and control in Electrical drives <b>Track 11(T11):</b> Applications of Power Electronics in Power System <a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>			Chair: Dr. Shailendra Jain Co-Chair: Dr. Raj Kumar Garg Rapporteur: Mr. Sunil Bansal
S.N.	Paper ID	Paper Title	Primary/Registered Author
1	141	MODEL PREDICTIVE TORQUE CONTROL OF SWITCHED RELUCTANCE MOTOR DRIVE	VIJAYA VARDHAN REDDY P, GANTASALA BHAVANA
2	158	GRID INTEGRATED SOLAR PV SYSTEM WITH COMPARISON BETWEEN FUZZY LOGIC CONTROLLED MPPT AND P&O MPPT	ABHISHEK SRIVASTAVA, AMIT KUMAR ROY
3	177	IMPLEMENTATION AND DESIGN OF NINE LEVEL INVERTER WITH LESSER NUMBER OF SWITCHES USING PWM TECHNIQUE	PREETI PATERIYA
4	197	DIRECT POWER CONTROL SCHEME WITH VOLTAGE MODULATION CONTROL TECHNIQUE FOR A WEAK GRID CONNECTED VOLTAGE SOURCE INVERTERS THROUGH BAND PASS FILTER	MD. KAISAR AZAM ANSARI
5	200	A SURVEY ON GRID COUPLED POWER CONVERSION DEVICES THAT IMPLEMENT VIRTUAL INERTIA	JOSHUA T RYAN
6	217	SINGLE PHASE GRID CONNECTED PV INVERTER BASED ISLANDING	PAMITA JAIN
7	48	ELECTRIC AND HYBRID VEHICLES – A COMPREHENSIVE OVERVIEW	SESHA GOPAL SELVAKUMAR



<b>Technical Session: TS6-B</b> Venue: SLIET Longowal 11 <sup>th</sup> Dec 2021			<b>3.15-4.45 pm</b>
<b>Track 13b(T13b):</b> Applications of Soft Computing Techniques in Electrical Power and Energy Systems <a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>			Chair: Dr. Anupma Marwaha Co-Chair: Dr. Manmohan Singh Rapporteur: Dr. Mohit Kumar
S.N.	Paper ID	Paper Title	Primary/Registered Author
1	133	EXPERIMENTAL ANALYSIS OF EFFECT OF TUNING PARAMETERS ON THE PERFORMANCE OF DIVERSITY-DRIVEN MULTI-PARENT EVOLUTIONARY ALGORITHM	SUMIKA CHAUHAN
2	135	PERFORMANCE ANALYSIS OF MODEL PREDICTIVE CONTROL FOR CASCADED TANK LEVEL CONTROL SYSTEM	BHAWESH PRASAD
3	139	OPTIMAL GENERATION SCHEDULING OF ELECTRICAL POWER SYSTEM BY USING HYBRID METAHEURISTIC SEARCH TECHNIQUE	ASHUTOSH BHADORIA
4	146	SHORT-RANGE FIXED-HEAD HYDROTHERMAL GENERATION SCHEDULING USING WATER CYCLE ALGORITHM	ASHOK KUMAR
5	147	APPLICATION OF HYBRID ARTIFICIAL ALGAE ALGORITHM FOR DYNAMIC ECONOMIC LOAD DISPATCH PROBLEM	VEENUS KANSAL
6	150	ECONOMIC LOAD DISPATCH USING HCGSA	AVNEET KAUR
7	151	MULTIOBJECTIVE DYNAMIC ECONOMIC DISPATCH AMALGAMATING SOLAR PV AND WIND POWER GENERATION USING HYBRID SCA	GURPREET KAUR
8	160	AN EXTENSIVE STUDY ON OPTIMIZATION AND CONTROL TECHNIQUES FOR POWER QUALITY IMPROVEMENT	RITU VERMA
9	166	ECONOMIC LOAD DISPATCH USING BLACK WIDOW OPTIMIZATION ALGORITHM	KANCHAN PAWANI



<b>Technical Session: TS7-B</b> Venue: SLIET Longowal 11 <sup>th</sup> Dec 2021			<b>5.00-6.30 pm</b>
<b>Track 14(T14):</b> Instrumentation & Biomedical Engineering <b>Track 15(T15):</b> Technology relevant to Covid-19 Pandemic <b>Track 16(T16):</b> Any other relevant topic <a href="https://meet.google.com/dnb-bbki-aho">https://meet.google.com/dnb-bbki-aho</a>			Chair: Dr. Surita Maini Co-Chair: Dr. Ashwani Kumar Aggarwal Rapporteur: Dr. Barasha Mali
S.N.	Paper ID	Paper Title	Primary/Registered Author
1	20	THE FINANCIAL IMPLICATION OF COVID-19 ON THE INDIAN POWER SECTOR	SUBHADIP BHATTACHARYA
2	56	USE OF PHASE CHANGE MATERIAL (PCM) AND AL <sub>2</sub> O <sub>3</sub> NANOFUIDS IN PYRAMIDAL SOLAR STILL	SRINIVAS DHARAMSOTH
3	86	A HYBRID APPROACH FOR TARGET DRUG DELIVERY WITH MICROWAVE THERMAL ABLATION	SIMRAN KAUR
4	93	BIOMASS AVAILABILITY AND BIOMASS-BASED GENERATING UNITS IN NORTH INDIA: A REVIEW	PRADEEP KUMAR
5	95	RANDOM FOREST FOR HEART DISEASE DETECTION: A CLASSIFICATION APPROACH	SANJAY DHANKA
6	106	GRAPHENE AND ITS NANOCOMPOSITES BASED MICROWAVE NON-INVASIVE PATCH APPLICATORS FOR MAXIMUM POWER LOCALIZATION	ALKA SINGLA
7	134	DETECTION OF PRESSURE POINTS ON THE RESIDUAL LIMB IN TRANSTIBIAL AMPUTATION USING THERMAL IMAGING	BHASKAR PANDEY
8	174	ALZHEINET: A SHALLOW CONVOLUTION NEURAL NETWORK FOR ALZHEIMER DETECTION USING MRI SCANS	SOURAV KUMAR SHUKLA
9	175	SHALLOW CONVOLUTION NEURAL NETWORK FOR BRAIN TUMOR CLASSIFICATION USING T1-WEIGHTED MRI SCANS	SOURAV KUMAR SHUKLA

